

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P882061

Luminaire Tested: **NAV-SB1D-730-U-T4FT**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P882061
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-730-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 70 CRI, 3000K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9909 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G2

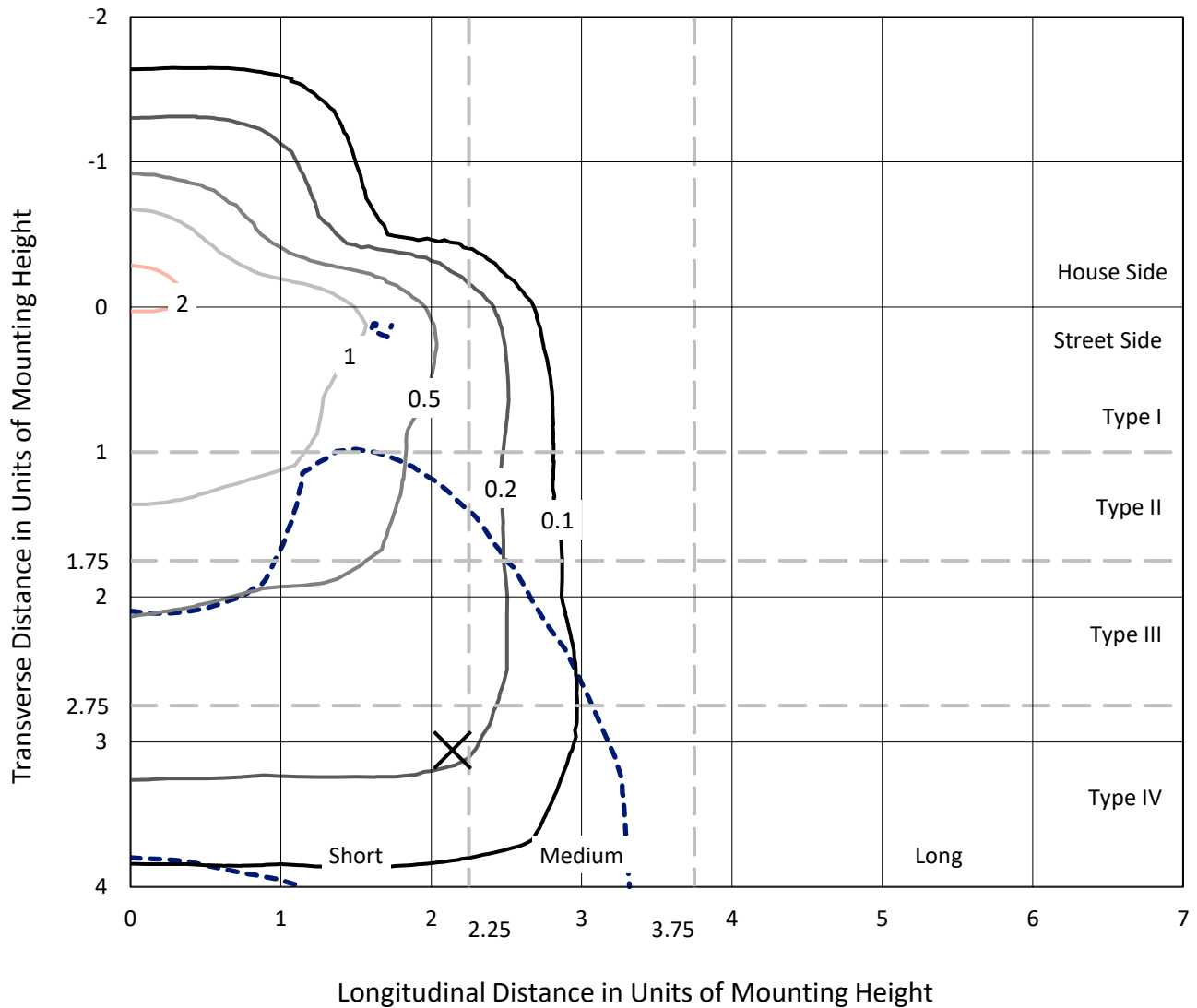
Input Watts (W): 79.6
Input Voltage (V): 120.0
Input Current (Ain): 0.638
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.673
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

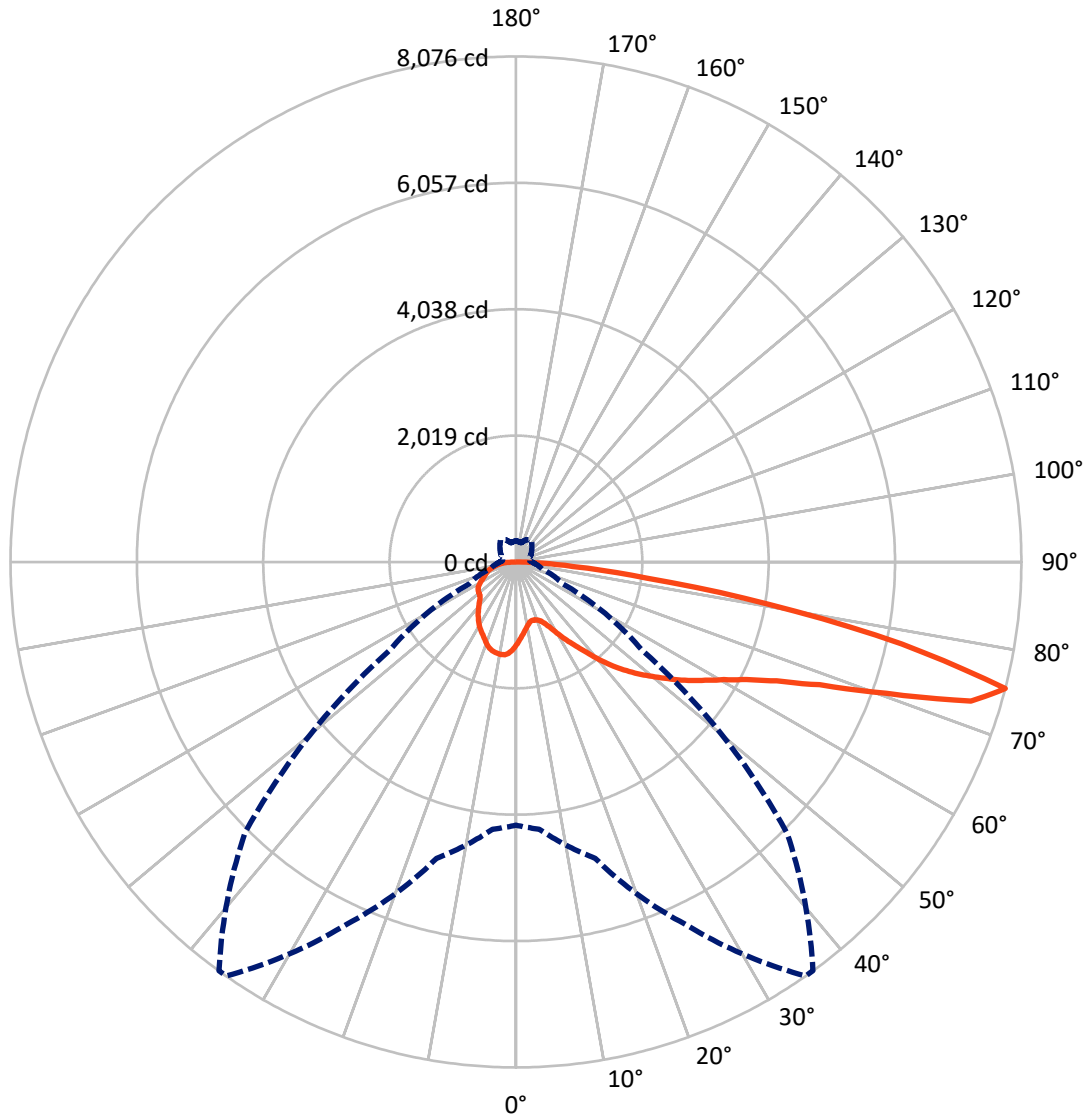
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.3 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2358.1	0.0	2358.1
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	7550.9	0.0	7550.9
	% Fixture	76.2	0.0	76.2
Total	Lumens	9909.0	0.0	9909.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.0	1.3
10°-20°	360.6	3.6
20°-30°	605.6	6.1
30°-40°	941.1	9.5
40°-50°	1396.9	14.1
50°-60°	1928.5	19.5
60°-70°	2339.7	23.6
70°-80°	1933.6	19.5
80°-90°	278.1	2.8
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	9909.0	100.0
0°-180°	9909.0	100.0

Coefficient of Utilization



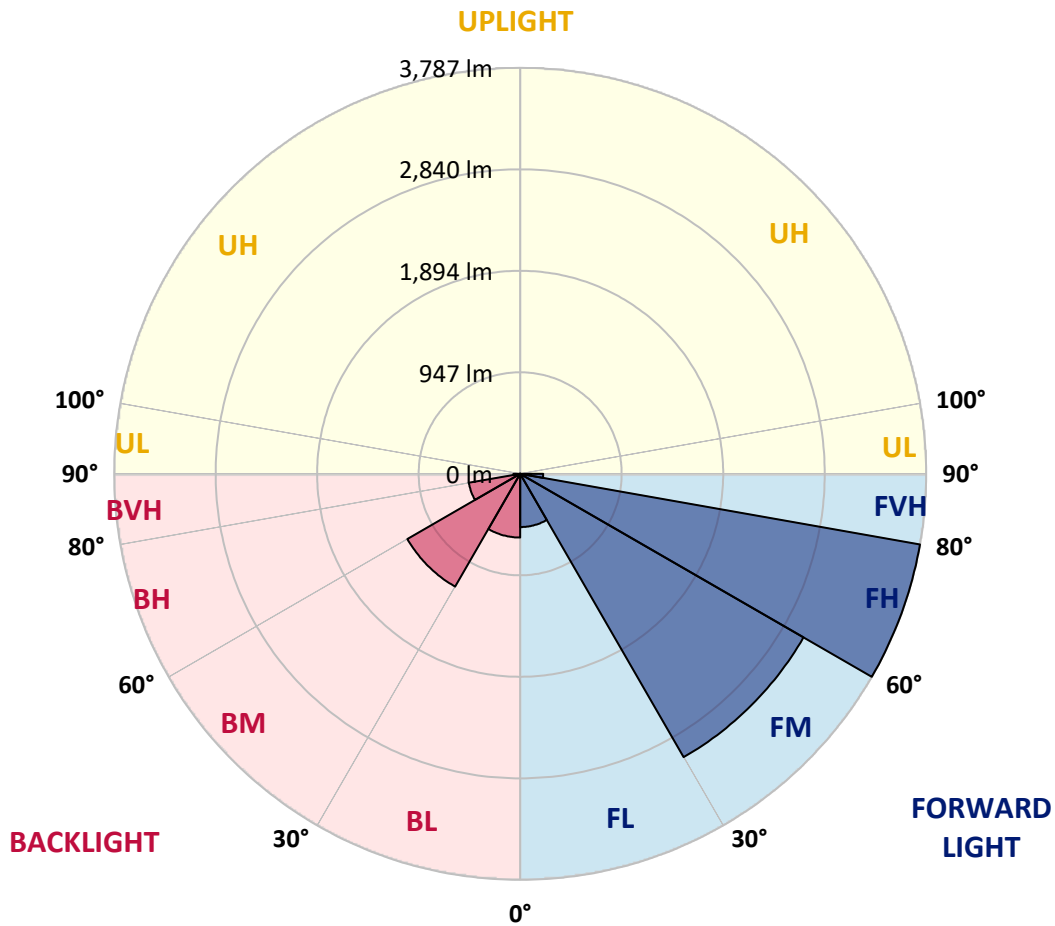
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	496.9	5.0			
FM (30°-60°)	3051.4	30.8			
FH (60°-80°)	3787.1	38.2			G2/5000
FVH (80°-90°)	215.5	2.2			G2/225
BL (0°-30°)	594.3	6.0	B2/1000		
BM (30°-60°)	1215.0	12.3	B2/2500		
BH (60°-80°)	486.2	4.9	B1/500		G1/500
BVH (80°-90°)	62.6	0.6			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1320.4	1320.4	1320.4	1320.4	1320.4	1320.4	1320.4	1320.4	1320.4	1320.4	1320.4
2.5°	1217.6	1225.1	1228.3	1226.7	1234.7	1233.7	1244.9	1258.8	1278.1	1296.9	1324.2
5°	1123.8	1131.9	1138.8	1145.3	1160.8	1165.6	1183.3	1210.1	1245.4	1281.3	1326.3
7.5°	1036.5	1043.5	1054.2	1066.0	1092.2	1097.1	1126.5	1168.3	1217.6	1270.1	1332.2
10°	965.3	972.3	983.5	996.9	1029.6	1035.5	1073.0	1128.7	1193.0	1259.4	1338.7
12.5°	934.8	936.9	943.3	956.7	985.1	988.9	1030.1	1093.9	1168.8	1251.3	1348.3
15°	933.1	937.4	938.0	944.9	968.5	970.1	1008.1	1071.4	1153.8	1249.7	1362.8
17.5°	949.2	952.4	947.6	951.9	971.7	974.4	1004.4	1060.6	1149.0	1256.7	1387.4
20°	992.1	994.8	980.3	974.4	988.9	991.0	1020.5	1067.6	1153.8	1271.2	1421.1
22.5°	1083.1	1084.7	1049.4	1025.3	1026.4	1027.4	1053.1	1096.0	1172.6	1297.4	1464.0
25°	1225.1	1224.0	1167.8	1121.2	1094.4	1088.5	1105.6	1142.1	1204.2	1332.2	1519.2
27.5°	1391.2	1383.1	1326.9	1257.2	1198.8	1190.3	1186.5	1202.1	1249.2	1378.3	1586.7
30°	1578.6	1571.1	1510.6	1419.5	1338.7	1324.7	1289.4	1281.3	1316.2	1441.0	1680.4
32.5°	1784.3	1779.5	1707.2	1596.9	1488.6	1472.6	1413.1	1391.7	1419.0	1535.8	1811.1
35°	1956.8	1952.5	1892.5	1779.0	1646.7	1626.8	1566.3	1542.2	1556.1	1657.4	1982.0
37.5°	2112.7	2110.6	2059.1	1969.7	1833.1	1809.0	1740.9	1732.9	1730.2	1817.5	2189.3
40°	2257.3	2252.0	2198.4	2151.3	2050.0	2028.1	1968.1	1961.1	1940.8	2014.7	2423.9
42.5°	2417.5	2403.6	2325.9	2303.9	2276.6	2258.4	2222.5	2223.6	2178.6	2237.0	2672.5
45°	2548.2	2540.2	2460.4	2447.5	2477.0	2469.5	2500.5	2508.6	2421.3	2470.0	2930.7
47.5°	2688.6	2681.1	2613.6	2604.5	2684.3	2686.4	2796.2	2798.9	2658.0	2712.1	3189.4
50°	2861.6	2850.9	2783.9	2795.2	2884.6	2892.7	3093.5	3075.3	2876.0	2958.0	3446.0
52.5°	2975.7	2982.1	2967.6	2985.9	3108.0	3115.5	3386.0	3339.4	3091.9	3200.7	3697.8
55°	3059.8	3072.6	3117.6	3159.4	3343.7	3351.2	3661.9	3590.6	3270.8	3425.6	3934.5
57.5°	3168.0	3149.8	3233.9	3315.3	3567.6	3587.4	3930.3	3832.8	3429.4	3619.6	4096.8
60°	3323.3	3310.5	3375.8	3496.4	3818.3	3849.9	4214.2	4050.8	3545.6	3773.3	4128.5
62.5°	3638.3	3606.2	3616.3	3722.9	4134.3	4176.1	4534.5	4240.9	3603.5	3833.3	3959.2
65°	4109.2	4054.0	4002.6	4076.5	4579.5	4620.7	4896.1	4390.4	3582.1	3717.1	3509.7
67.5°	4702.2	4647.5	4584.3	4654.0	5235.2	5267.8	5342.3	4474.5	3413.3	3269.2	2715.3
70°	5191.2	5170.9	5246.4	5533.0	6282.4	6283.5	5914.4	4404.9	2951.0	2317.9	1571.1
72.5°	5126.4	5114.1	5512.1	6398.1	7602.3	7573.9	6456.0	3877.8	1987.9	1045.6	588.7
75°	4205.6	4285.4	4902.0	6382.6	8076.4	8072.6	6124.4	2465.2	822.3	433.4	304.3
77.5°	2255.2	2381.6	3182.5	4712.3	6304.9	6399.7	4305.8	862.4	353.0	277.5	210.5
80°	735.5	845.8	1268.5	2399.3	4096.8	4079.2	1845.4	338.5	241.6	196.6	145.7
82.5°	312.3	325.2	566.7	1133.0	2102.5	2069.9	587.6	194.5	169.8	134.5	90.0
85°	122.1	136.6	250.2	523.9	910.6	890.8	212.1	96.4	108.7	87.9	53.6
87.5°	40.2	48.7	89.5	179.5	283.4	273.2	52.0	33.2	47.1	40.2	19.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1320.4	1320.4	1320.4	1320.4	1320.4	1320.4	1320.4	1320.4	1320.4	1320.4	1320.4
2.5°	1331.7	1340.3	1350.4	1365.4	1378.3	1389.0	1400.3	1407.2	1409.9	1417.9	1417.4
5°	1341.3	1360.1	1385.3	1409.9	1434.0	1448.5	1461.3	1467.8	1473.6	1477.9	1479.0
7.5°	1357.4	1381.5	1421.1	1453.3	1473.6	1485.4	1494.0	1491.9	1494.0	1495.1	1496.7
10°	1371.3	1405.1	1452.2	1482.8	1498.3	1498.8	1496.7	1489.2	1485.4	1486.0	1487.0
12.5°	1387.9	1425.4	1476.3	1502.0	1506.3	1494.5	1485.4	1472.6	1467.8	1465.6	1464.5
15°	1410.4	1453.3	1502.6	1512.2	1501.5	1486.5	1471.0	1450.1	1439.4	1430.8	1433.5
17.5°	1437.8	1484.9	1522.9	1516.0	1492.9	1468.3	1443.1	1411.5	1389.5	1380.4	1381.0
20°	1475.8	1518.1	1538.5	1507.9	1473.1	1435.6	1392.8	1354.2	1333.8	1324.7	1323.7
22.5°	1521.9	1562.6	1553.5	1494.0	1444.7	1384.7	1331.2	1302.8	1292.6	1286.2	1287.2
25°	1577.0	1611.8	1564.2	1473.6	1398.1	1317.2	1276.0	1266.9	1262.1	1257.2	1257.2
27.5°	1648.8	1667.6	1572.2	1443.6	1325.3	1245.4	1230.4	1232.1	1230.4	1222.4	1224.0
30°	1743.6	1739.9	1579.7	1394.9	1241.7	1180.6	1181.7	1188.7	1189.7	1184.4	1187.1
32.5°	1868.4	1830.4	1583.5	1331.7	1161.9	1123.8	1124.9	1132.4	1137.8	1128.7	1133.0
35°	2019.5	1935.9	1577.6	1252.4	1100.3	1069.7	1061.7	1063.9	1065.5	1056.9	1062.8
37.5°	2195.7	2054.3	1551.3	1164.6	1049.4	1016.7	999.6	985.1	976.5	968.5	973.9
40°	2389.1	2183.4	1503.1	1078.9	992.6	960.5	934.8	907.4	878.5	867.8	872.6
42.5°	2591.6	2316.3	1444.7	996.9	927.3	901.0	873.7	834.0	790.7	768.7	771.4
45°	2801.6	2452.3	1387.4	916.0	860.3	849.0	817.4	769.8	722.6	694.8	692.6
47.5°	3007.3	2580.9	1303.3	834.6	797.6	809.9	785.3	741.4	688.9	645.0	640.1
50°	3203.9	2701.4	1165.6	752.1	746.7	798.2	774.6	711.4	651.4	595.1	590.3
52.5°	3398.9	2798.9	989.4	677.1	719.4	794.9	760.7	691.0	617.6	558.7	552.3
55°	3564.4	2849.3	819.6	612.8	679.8	767.6	744.1	666.9	570.0	507.3	501.9
57.5°	3658.7	2808.5	678.2	549.6	625.1	722.6	715.7	615.5	513.2	465.0	458.5
60°	3618.0	2643.6	562.5	494.4	573.2	673.9	666.4	564.6	469.8	424.3	417.8
62.5°	3393.5	2329.1	470.9	446.2	526.0	624.1	617.1	525.5	436.6	392.7	385.7
65°	2941.4	1894.7	399.6	406.0	478.4	564.1	574.2	492.8	410.3	367.5	360.5
67.5°	2243.4	1372.4	343.9	371.2	431.8	505.1	534.6	469.3	388.4	347.7	341.2
70°	1278.7	779.4	296.8	337.5	390.5	450.5	504.1	450.5	364.8	331.0	326.8
72.5°	484.8	357.8	256.6	303.7	350.9	404.4	470.3	421.0	337.5	312.3	308.0
75°	258.7	218.0	215.9	264.1	305.3	359.4	428.0	392.1	317.1	330.0	340.7
77.5°	176.2	154.3	180.5	226.1	255.5	309.6	383.0	348.2	274.8	273.7	252.3
80°	122.1	109.3	146.8	182.1	197.7	260.3	334.3	298.9	223.9	208.9	199.8
82.5°	73.4	71.2	109.8	136.1	139.8	200.9	276.9	250.7	183.2	159.6	160.7
85°	40.2	42.3	70.2	79.8	81.4	140.3	216.9	193.9	140.9	118.4	119.5
87.5°	11.2	14.5	25.7	31.6	39.1	72.9	129.1	115.2	70.7	49.3	49.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)